

What is claimed is:

1. A virtual file system which provides mirroring and linking of two physical file systems, comprising:

means for mounting components of each of said two physical file systems
5 in a single directory; and

a virtual file system data structure containing elements which respectively
correspond to each of the mounted components, each of said elements having an
application interface data structure with two associated pointers that respectively
point to application interface data structures of a corresponding component in each
10 of said two physical file systems.

2. The virtual file system of claim 1, wherein said application interface
data structures correspond to a vnode structure.

3. The virtual file system of claim 1, wherein said components
15 comprise directories and files.

4. A method for sharing files in a computer system, comprising the
steps of:

mounting components of each of two physical file systems in a
single directory, such that a copy of each component is stored in each of said two
20 physical file systems;

receiving a request to perform a write operation on one of said
components; and

performing said write operation on both copies of said one
component in said two physical file systems, respectively, in real time in response
25 to said request.

5. The method of claim 4 wherein said request designates said one component, on which the write operation is to be performed, by means of a path name that is common to both of said physical file systems.

6. The method of claim 4 wherein the steps of performing said write operation includes the steps of acquiring a lock for each copy of said one component, and inhibiting said write operation until both locks can be acquired.

5